



## Expanding the Authority of Community Colleges to Confer Baccalaureate Degrees in Applied and Technical Areas

### House Bill 4148 (Shirkey)

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As Governor Snyder noted in his 2011 *Special Message on Developing and Connecting Michigan's Talent*, in the 20th century, the most valuable assets to job creators were financial and material capital. In a changing global economy, that is no longer the case. Today, talent has surpassed other resources as the driver of economic growth.

Unfortunately, Michigan lags other states in achieving the level of educational attainment that will drive prosperity for our citizens. According to the Business Leaders for Michigan *2013 Economic Competitiveness Benchmarking Report*, Michigan ranks in the bottom half of states for the percentage of our working-age population with an Associate's degree or higher. As a result, we have watched per capita income actually shrink over the last decade.

Meanwhile, good jobs go unfilled. Data from the Workforce Intelligence Network issue brief *The Career Readiness Gap: Challenges of Career Readiness and Awareness in Southeast Michigan* demonstrate the strong employer demand for highly trained workers. This skills gap will only be exacerbated by Michigan's aging workforce in fields such as information technology, skilled trades, health care, and nursing.

**SOLUTIONS:** In 2012, the Legislature granted community colleges in Michigan the authority to join community colleges in 20 other states by conferring baccalaureate degrees in four applied and technical program areas - concrete technology, maritime technology, energy production technology, and culinary arts. The rationale for that legislation was improving college access, affordability, and responding to workforce demands. It was always clear that the legislation would need to be revisited over time as employer needs changed. HB 4148 does just that by extending the authority to confer degrees in nursing, allied health, ski area management, information technology, and manufacturing technology.

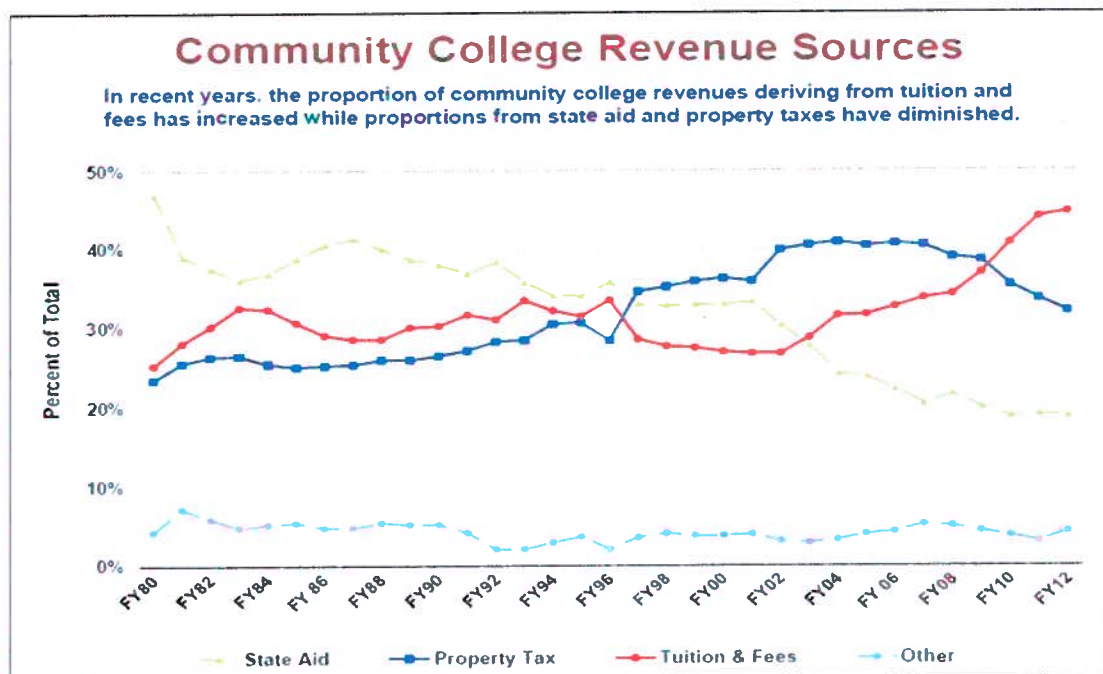
**COST:** Unfortunately, as the need for college has increased, so has its cost. According to the Institute for College Access & Success, 71% of students graduating from four-year colleges now have student loan debt, and the average loan has increased to \$29,400 – a 25% increase in just five years! Graduates that received a Pell Grant – those from the neediest families – were by far the most likely to have debt. Allowing community colleges to confer additional baccalaureate degrees will help mitigate the costs and allow more students to earn a degree.

**ACCESS:** The average age of a community college student in Michigan is 26. Many students have jobs, families, and homes; they cannot simply move to a college campus for a few years. But Michigan is a big state. For students in many areas, commuting to a baccalaureate degree program would require several hours. While Michigan's public and private universities have worked to create numerous partnerships that allow four-year degrees to be offered on a community college campus, there still remain excellent two-year programs in several applied and technical areas for which baccalaureate degrees are not offered by a university.

**QUALITY:** Baccalaureate programs offered at both community colleges and universities follow the same accreditation requirements from *The Higher Learning Commission, North Central Association of Colleges and Schools*. In addition, data from the National Council of State Boards of Nursing show that pass rates for community college nursing graduates are comparable to their four-year counterparts on the National Council Licensure Exam (NCLEX): in Michigan in 2012, 91.3% of first-time Associate degree trained candidates passed the NCLEX, versus 92.7% of baccalaureate degree trained candidates.

**BOTTOM LINE:** Michigan must innovate in the delivery of higher education opportunities to its residents and evolve its workforce into what employers demand. The community college baccalaureate is part of the solution.

## Funding Sources for Community Colleges and Universities



Funding	Community Colleges	Public Universities
State Appropriation	\$294 Million	\$1.3 Billion
Property Tax Revenue	\$506 Million	\$0
Total Public Funding	\$800 Million	\$1.3 Billion
State Aid/Student*	\$655	\$4,366
Property Tax/Student	\$1,127	0
Total Public Funding/Student	\$1,782	\$4,366
State Aid/Student**	\$1,719	\$4,694
Property Tax/Student	\$2,928	\$0
Total Public Funding/Student	\$4,647	\$4,694
Average Annual Tuition	\$2,927	\$10,766

\*Headcount; \*\* FYES

Source: Community College Data from ACS: <http://www.michigancc.net/acs/dt2013/book13.pdf>.

University Data from Senate Fiscal Agency:

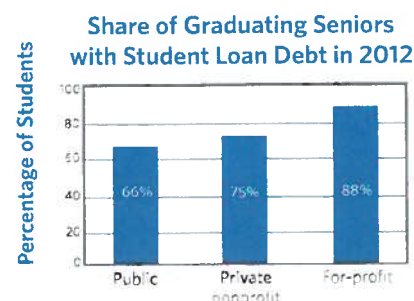
<http://www.senate.michigan.gov/sfa/Departments/DepartmentPublications/HigherEdAppropsReport2013.pdf>

## QUICK FACTS ABOUT STUDENT DEBT

MARCH 2014

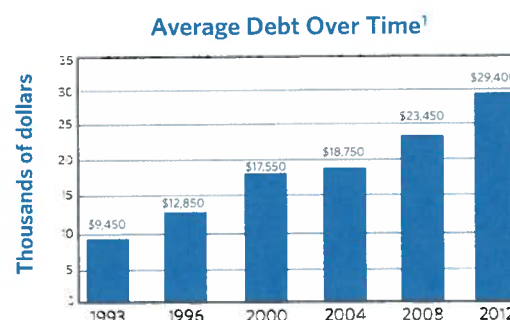
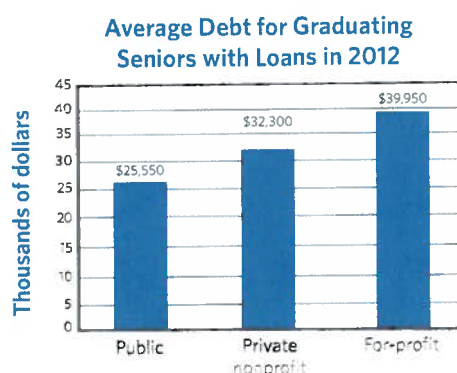
In 2012, 71% of all students graduating from four-year colleges had student loan debt. That represents 1.3 million students graduating with debt, up from 1.1 million in 2008 and 0.9 million in 2004. In 2012:

- 66% of graduates from *public* colleges had student loans.
- 75% of graduates from *private nonprofit* colleges had student loans.
- 88% of graduates from *for-profit* colleges had student loans.



Average debt levels for all graduating seniors with student loans rose to **\$29,400 in 2012** — a 25% increase from \$23,450 in 2008. In 2012:

- At *public* colleges, average debt was **\$25,550** — 25% higher than in 2008, when the average was \$20,450.
- At *private nonprofit* colleges, average debt was **\$32,300** — 15% higher than in 2008, when the average was \$28,200.
- At *for-profit* colleges, average debt was **\$39,950** — 26% higher than in 2008, when the average was \$31,800.



**About one-fifth (20%) of 2012 graduates' debt was comprised of private loans.** Private loans (non-federal) are typically more costly and provide fewer consumer protections and repayment options than safer federal loans.<sup>2</sup>

**Graduates who received Pell Grants, most of whom had family incomes under \$40,000, were much more likely to borrow and to borrow more.** Among graduating seniors who ever received a Pell Grant, 88% had student loans in 2012, with an average of \$31,200 per borrower. In contrast, 53% of those who *never* received a Pell Grant had debt, with an average of \$26,450 per borrower — \$4,750 less than the average debt for Pell recipients with debt.

<sup>1</sup> Figures are for graduating seniors with loans. In 1993, 47% of students graduated with loans; this figure rose to 59% in 1996, 64% in 2000, 65% in 2004, 68% in 2008, and 71% in 2012.

<sup>2</sup> This figure represents the share of the Class of 2012's student debt that is private loans. "Private loans" refers here to all non-federal loans made to students to cover the cost of attending college.

Source: The facts and figures above are based on analysis of the most recent undergraduate data from the National Postsecondary Student Aid Study (NPSAS), which is conducted every four years by the U.S. Department of Education. NPSAS (<http://nces.ed.gov/surveys/npsas/>) is a comprehensive nationwide survey designed to determine how students and their families pay for college. Figures for all years reflect the cumulative student loan debt (federal and non-federal) of undergraduates who were citizens or permanent residents, attended colleges in the 50 states or District of Columbia, and expected to graduate with a bachelor's degree during the academic year, using the latest available data as of March 2014.

Suggested citation: The Institute for College Access & Success. 2014. *Quick Facts about Student Debt*. <http://bit.ly/1lxjskr>.



WORKFORCE  
INTELLIGENCE  
NETWORK  
for Southeast Michigan

# Issue Brief: The Career Readiness Gap

Challenges of Career Readiness and Awareness in Southeast Michigan

## Executive Summary

Southeast Michigan's economy is beginning to show signs of recovery after unprecedented economic upheaval. However, the long-term sustainability of that recovery is under threat due to inadequate pipelines of students and workers participating in many of the region's most in-demand careers. Southeast Michigan's talent development systems<sup>1</sup> should be supported by effective state and federal policies to enable practices that yield a robust and skilled talent pool for employers. In its current state, the region has students and jobseekers who are not aware of and/or prepared for career opportunities, or do not know where to go for additional education or training. Educational and training programs are not currently aligned with

employer needs. Employers are often not actively engaged in preparing the workforce of the future. Policymakers do not know if programs and policies are working, and current policies and strategies emphasize educational attainment but lack the ability to reasonably prepare individuals for the workforce. The career readiness revolution is starting, but there is much that still needs to be accomplished. As stakeholders in Southeast Michigan continue to learn about best practices from around the country and build upon the data-and-employer driven approaches they are testing locally, everyone has a role to play and must invest the time and energy to ensure success. Failing to act could prove costly to the Michigan economy.

## Developing Recommendations

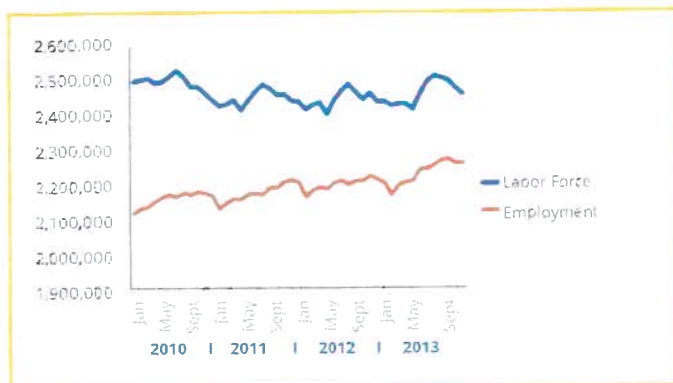
WIN will hold policy town hall meetings in fall 2014 to develop recommendations to address the career readiness gap. Each town hall meeting will address a different targeted audience where policy solutions may be relevant (employers, students and jobseekers, policymakers, educators, etc.). WIN will release updates regarding the recommendations as they become available. If your organization would like to host a policy town hall, please contact Tricia Walding via phone at 313.744.6710 or via e-mail at [tricia.walding@win-seemich.org](mailto:tricia.walding@win-seemich.org).

<sup>1</sup> Includes colleges, Michigan Workforce Development, etc.



## Current State of Affairs–Talent Demand

After more than a decade of upheaval, Southeast Michigan's economy is showing clear evidence of recovery. Unemployment has fallen from 19% in 2009 to roughly 8% in 2014, with projections of around 5-6% by 2016. After more than 10 years of declining labor force participation, the number of individuals working or looking for work has stabilized across the region and now is beginning to increase. Labor demand from employers is on the rise as well. In many sectors, demand far outpaces the supply of skilled talent.



The current challenge to the economic recovery and employer success in Southeast Michigan is a lack of career ready applicants. The Southeast Michigan talent ecosystem currently includes:

- **Students and jobseekers** who are not aware of career opportunities and/or do not know where they can learn more.
- **Students and jobseekers** who are not prepared for career opportunities and/or do not know where to go for additional education or training.
- **Educational and training programs** that are not aligned with employer needs.
- **Employers** who are not directly engaged in preparing the workforce of the future.
- **Policymakers** who do not know if programs and policies are working.
- **Current policies and strategies** that emphasize educational attainment but not preparation for the workforce.

Southeast Michigan's economic upheaval began more than 15 years ago, but from 2001 to 2009, the region lost almost 300,000 jobs, 73% in manufacturing. Recently, the region's employment base has started to recover at a faster rate than almost any other region in the country. Employers have reacted and adjusted

to the dramatic shifts in employment and technology, which have revealed new, and perhaps surprising, opportunities for Southeast Michigan's job seekers.

After a slow start in the first half of 2013, job demand climbed above 2012 levels. In 2013, the top jobs in-demand included occupations that required both high levels of education and training, and those that do not. Software developers for applications, retail salespersons, and registered nurses top the list of in-demand occupations in 2013<sup>2</sup>. Of the more than 374,000 postings in 2013, 56% are in high demand clusters of information technology, advanced manufacturing (engineers & designers and skilled trades & technicians), health care, and retail and hospitality. Postings for jobs in information technology now exceed<sup>3</sup> those for engineering, production, or health care jobs. Many of these jobs are not in core IT firms, but instead driven by new technological demands from the automotive, health care, and finance industries.

Early indicators show that this increase is a result of increased economic activity, and employers have even greater demand for a highly skilled and knowledgeable workforce. New job opportunities increasingly require skills and credentials of a more specialized nature, mainly due to technological changes. Many employers with an interest in talent development understand that to fulfill current and future gaps, we must look to cultivating and growing our own career-ready workforce.

IT and Engineering are among the most difficult to hire. According to CareerBuilder, a "hiring indicator" of 0 means a job is impossible to fill, while an indicator of 100% means it is extremely easy to fill. The hiring indicator for skilled trades is 39, for engineering is 32, and for IT is 24. This means these occupations are quite difficult to fill.

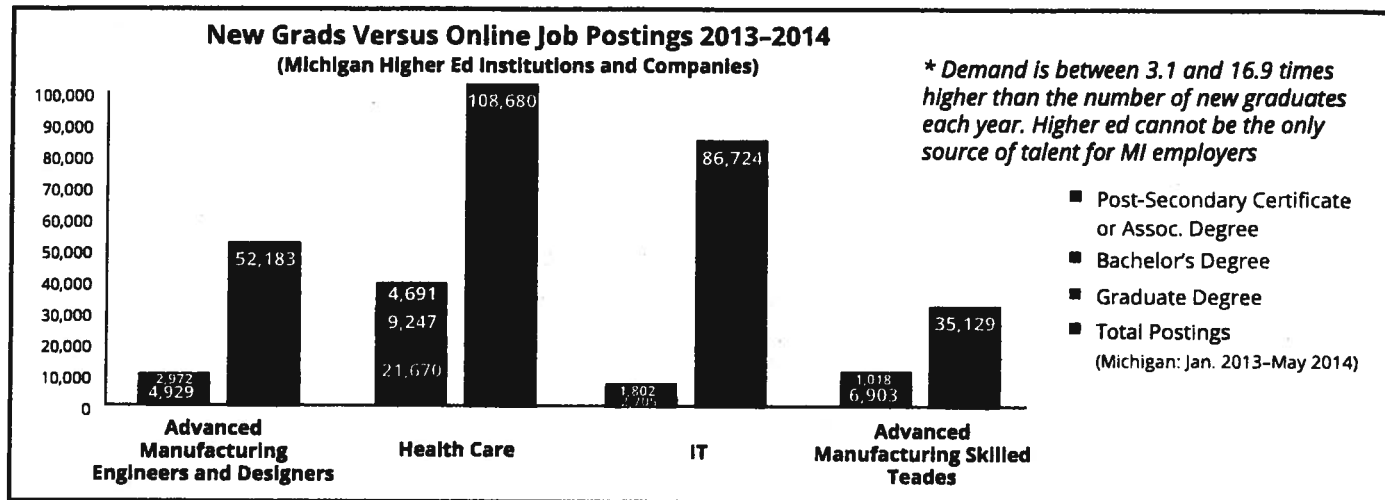
Occupational Clusters	% of total job postings
Information Technology	11.75%
Advanced Manufacturing	9.88%
Skilled Trades and Technicians	3.04%
Engineers and Designers	6.84%
Health Care	10.75%
Retail and Hospitality	24.14%

<sup>2</sup> A list of the top 30 occupations in demand for 2013 is included at the end of the document.

<sup>3</sup> Based on real-time job posting data from Burning Glass Technologies.

## Current State of Affairs-Supply

With the increase in job demand, an increase in supply is needed, but a lack of awareness and career readiness plagues students and job applicants in the region. High school students must meet state and federal requirements for education, leaving little time for career awareness and preparation. The student-to-counselor ratio in the region is 600 students to every one counselor. These counselors must prioritize mental health and well-being of students before career counseling, leaving most students sorely lacking for career awareness and advice that would help steer them toward in-demand careers.



**Students are not enrolling at sufficient rates in educational courses, programs, or training in many high-demand fields, such as IT, engineering, and the skilled trades.** Though the community welcomes the return of new jobs post-recession, many within the region are not familiar with in-demand jobs and how to access those opportunities. The manufacturing legacy and recent employment decline have reinforced a negative perception of the industry—and the perception that jobs related to manufacturing, including the auto industry, are low-tech, low-skilled, dirty, or unstable. These perceptions have served as a deterrent for students, parents and teachers, who may not look toward manufacturing as a viable career choice. Many of the most in-demand jobs are related to STEM fields, yet beyond some health care positions that remained stable through the recession, most students and jobseekers lack exposure to, and are generally unfamiliar with, viable, in-demand career opportunities. Therefore, they are unable to make informed educational choices. This has resulted in low enrollment in these programs.

**Not only is there a deficiency of students interested in high-demand industries, but there is a shortfall in the number of individuals completing degrees or certifications relative to the employer demand for workers with various levels of education.** Online job postings between January 2013 and May 2014 in Michigan showed a need for nearly 47,000 engineering and design workers with bachelor degrees, but only

5,000 degrees were awarded in the state in these areas of study. Similar trends are present in the other industries tracked; with IT postings for bachelor degrees exceeding 72,000, with only 1,800 graduates attaining this degree. In health care, almost 31,000 postings indicated a requirement for a graduate degree, but degree attainment for this level of education was below 5,000 completions<sup>4</sup>.

**Employers are looking for experienced workers, yet jobseekers typically do not have the opportunity to gain that necessary experience while they are in training or in school.** High unemployment rates and delayed retirements have pushed back first-time or transitional employment for many jobseekers. Particularly troubling is the region's decrease in youth employment over the past 10 years. Employment of the areas 16-19 year olds dropped 18.7% from 2000-2012, from 46.1% to 27.4% in 2012. For the 20-24 year old age bracket in the Metro Detroit area, employment dropped from 70.8% of individuals to 62.3%, putting the area in the 78th percentile, or worst 22% of regions in the U.S. for the age group. Brookings Institute Research shows that young people are more likely to persist in their education, both through high school and into college, if they see the relevance of their academic experience to real-world work experience.

**Leaky pipelines, particularly around career transition, cause disruptions in talent development.**

<sup>4</sup>Source: Online job postings that include the higher education requirement, resulting in a calculation of the number of postings requiring a specific degree. Online job postings do not directly link to the higher-level degree awards.



Some individuals may drop out of training due to lack of a full awareness of real career opportunities and because of the difficulty in navigating the transitions between K-12, higher education, and workforce systems.

**Talent systems must be supported in their efforts to be sustainable and accountable.** Certain state and federal policies can enable or prevent the systems from accurately tracking career readiness success.

**Critical pathways that give students experience, like Career & Technical Education, are often perceived as “alternative track,” not for the college bound.** While these programs give students critical exposure to real-world career opportunities and skills, the programs are often undervalued, overlooked and avoided because they do not align sufficiently with the focus on college readiness.

## Future State of Affairs: Things Will Only Get Worse

**We will have fewer overall workers in the future, no matter what we do.** In the United States, every day there are 10,000 new baby boomers who reach retirement age<sup>5</sup>. This will be the case every day for the next 17 years. In Southeast Michigan, this translates into roughly 158 people per day (58,000 people per year). This will be even more apparent in information technology where 39.7% of the almost 74,000 workers are age 45+ (13.1% are 55+), in health care, where 45.7% of the 244,410 workers are over 45 (20.1% are 55+) and engineering and design, where 51.3% of the 76,000 workers are age 45+ (19.3% are 55+)<sup>6</sup>.

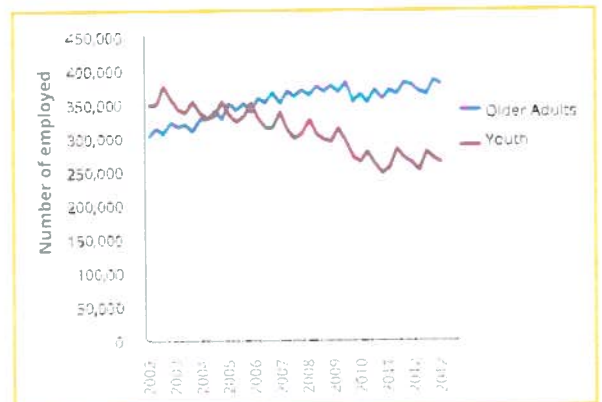
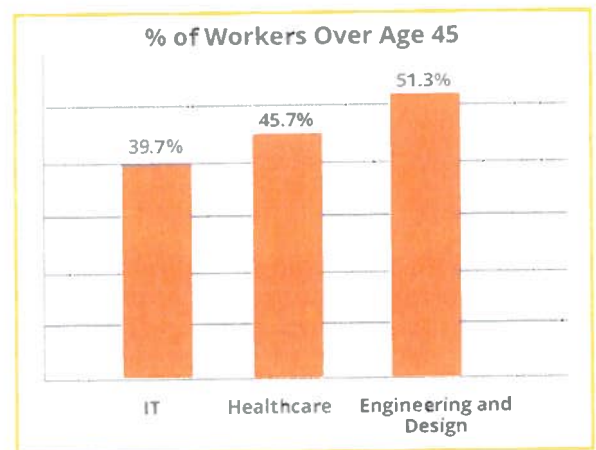
**Lack of education:** By 2018, 63% of job openings nationwide will require at least some college education (56% in 1992). In 2012, 45% of SE MI advanced manufacturing postings called for college education (21% in 2007<sup>7</sup>). Today less than 40% of the SE MI workforce (over age 25) holds a college degree. Another 24% has taken some college coursework<sup>8</sup>.

**The brain drain: Place matters, but jobs matter more.** A 2012 Detroit Regional Chamber study showed that 85% of college grads who left the state left for **career opportunities**, and 38% left for urban experiences. In looking for their next job, 86% of these graduates said they would prefer a job somewhere they would like to live, while 56% said they would simply look for the best job, regardless of location. While there is substantial effort and resource dedicated to educating students about great places to live in Michigan, and sometimes making those places better, there is little emphasis placed on informing the workforce—current and future—about the volume and type of available jobs.

**Career readiness among college graduates:** A McKinsey & Company study from December 2012 concluded that 42% of employers believe new graduates are adequately prepared by their colleges or other pre-employment training programs, and only 45% of new graduates think they are prepared for their jobs. Efforts that emphasize degree attainment are on the right track, but degree-attainment alone is not sufficient to ensure that employers will find the qualities they need in future talent.

**Lack of commitment to youth work experiences:** Fewer than 10% of 2012 Southeast Michigan online job postings asked for candidates with less than one year's work history. For those requesting a four-year degree, fewer than 4% are searching for candidates with less than a year's experience<sup>9</sup>.

Yet, work experiences among youth have been steadily declining. In the last 10 years, employment for youth ages 14-24 fell by 24.5% (85,400 jobs) while employment for older workers age 55+ climbed 25.2% (76,100)—an almost perfect inverse relationship. In fact, older workers compose the only age group that saw an employment increase during the last recession while, at 30%, metro-Detroit's youth unemployment rate is the highest of any metro area in the country. As older workers hang on longer, young people are left behind. They simply are not getting the skills and experience that employers want these days (typically 1-4 years) in the new workers they hire.



<sup>5</sup> Pew Research Center: Baby Boomers Retire. <<http://www.pewresearch.org/daily-number/baby-boomers-retire/>>

<sup>6</sup> Economic Modeling Specialists, Inc. 2013 data.

<sup>7</sup> Based on real-time job posting data from Burning Glass Technologies.

<sup>8</sup> Economic Modeling Specialist Inc.

<sup>9</sup> Based on real-time job posting data from Burning Glass Technologies.





# WORKFORCE INTELLIGENCE NETWORK

## The Bottom Line

Lack of effective career readiness programs could result in continued high levels of youth employment and even fewer workers with the experience needed to perform at the level needed by employers. Without guidance and data regarding careers in high demand, students and jobseekers may choose education programs that do not align with the needs of employers—leading to graduates who are unable to find jobs, and employers who cannot fill in-demand positions.

The Southeast Michigan region is at a pivotal point in economic and workforce development. Retirement rates are expected to increase with economic improvements, further exacerbating the problem, leaving employers struggling to find experienced, competent workers. The continued misalignment of training programs to the actual needs of employers may lead to a long-term talent pipeline issue. Companies may be less likely to fill job openings with individuals who are ready to work, leading to increased needs and costs for on-the-job training and less likelihood that employers will be able to appropriately fill their middle and high skilled openings. In turn, this may lead to less successful companies and

frustrated employers. This could result in a mass exodus of business from the region.

If we invest in career awareness for our middle schoolers, high schoolers, and young college students, Michigan may retain many of the young people and future workers that are projected to leave the state. Current projections from EMSI<sup>10</sup> indicate that the state could lose nearly 250,000 residents between the ages of 10 and 30 by 2023. We have the potential to retain at least 75,000 additional workers by helping students get into high-wage, lucrative careers within the next decade. Based on employer demand projections, not only will employment increase, but the **total income of Michigan families could grow by over \$4 billion dollars**. The additional income translates into roughly \$160 million in additional income tax revenue and over \$200 million in additional sales tax revenue for the state<sup>11</sup>.

The economic recovery of the Southeast Michigan region is not sustainable without changes to the way in which we approach career readiness and awareness.

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### Authors

Lisa Katz, Executive Director, WIN  
Tricia Walding, Project Manager-Research and Policy, WIN

### Acknowledgements

Greg Pitoniak, Southeast Michigan Community Alliance, Co-Chair, WIN Policy  
Denise McNeil, St. Clair County Community College, Co-Chair, WIN Policy

<sup>10</sup> Economic Modeling Specialists, Inc.

<sup>11</sup> Note: 2014 dollars and 2014 effective sales and income tax rates applied.



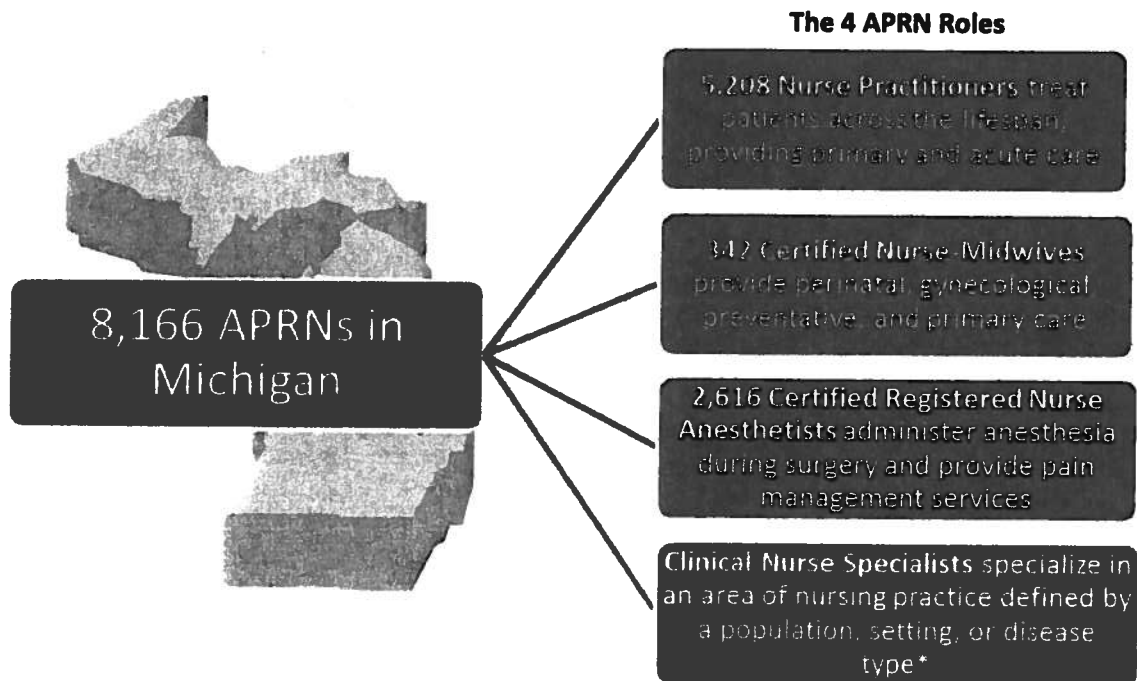
## Michigan Nursing Education at a Glance (Baccalaureate and Graduate)

There are 20 AACN member schools in Michigan. In 2013:

- **10,590 students were enrolled** in baccalaureate and graduate nursing programs.<sup>1</sup>  
8,443 baccalaureate students    1,606 master's students    541 doctoral students
- **3,502 students graduated** from baccalaureate and graduate nursing programs.<sup>1</sup>
- **However, 2,154 qualified applicants were turned away** from these programs, due primarily to the faculty shortage and a lack of clinical training sites.<sup>1</sup>
- There were **1,552 nursing students** studying to become graduate-prepared Advanced Practice Registered Nurses (APRNs), including **1,310 Nurse Practitioners**, **60 Certified Nurse-Midwives**, **86 Certified Registered Nurse Anesthetists**, and **96 Clinical Nurse Specialists**.<sup>1</sup>

## Michigan Nursing Workforce at a Glance

- **141,117 Registered Nurses** are licensed in Michigan.<sup>2</sup>
- **5.8% of Michigan's nurses** are licensed APRNs.<sup>2</sup>



## Access to Primary Care in Michigan

Healthcare expenditures by Michigan residents increased by an average of 5.6% annually between 1991 and 2009.<sup>3</sup>

- **Medically Underserved Areas/Populations (MUA/Ps)** are areas/populations the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) has designated as facing barriers to accessing health care. There are **112 MUA/Ps in Michigan**.<sup>4</sup>
- **63.63% of 1,705,696 Michigan residents living in the 277 Health Professional Shortage Areas (HPSAs)** in the state face primary care provider shortages.<sup>5</sup>
- HRSA estimates **205 additional primary care providers are needed** to adequately serve Michigan's HPSAs.<sup>5</sup>

Access to primary care providers is critical to maintaining a healthy population and reducing the rising cost of health care in Michigan.

## AACN Member Schools in Michigan (By Congressional District)

Finlandia University (MI-1)	Baker College (MI-5)	Madonna University (MI-11)
Northern Michigan University (MI-1)	Saginaw Valley State University (MI-5)	Oakland University (MI-11)
Grand Valley State University (MI-2)	University of Michigan – Flint (MI-5)	Eastern Michigan University (MI-12)
Hope College (MI-2)	Western Michigan University (MI-6)	University of Michigan (MI-12)
Calvin College (MI-3)	Siena Heights University (MI-7)	University of Detroit Mercy (MI-13)
Davenport University (MI-3)	Michigan State University (MI-8)	Wayne State University (MI-13)
Ferris State University (MI-4)	Rochester College (MI-8)	

*The American Association of Colleges of Nursing (AACN) represents over 740 schools of nursing offering a mix of baccalaureate, graduate, and post-graduate programs at institutions nationwide. For more information on AACN or higher nursing education, visit [www.aacn.nche.edu](http://www.aacn.nche.edu) or contact us at 202-463-6930.*

\*Certified Nurse Specialists are not a recognized APRN specialty in Michigan

<sup>1</sup> American Association of Colleges of Nursing. (2014). *2013-2014 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*. Washington, DC.

<sup>2</sup> Michigan's Official Web Site: Department of Licensing and Regulatory Affairs. (2014). *License 2000 License Count*. Retrieved February 25, 2014 from [http://www.michigan.gov/documents/lara/License\\_Counts\\_010214\\_443568\\_7.pdf](http://www.michigan.gov/documents/lara/License_Counts_010214_443568_7.pdf).

<sup>3</sup> Centers for Medicare & Medicaid Services (2011). *Health Expenditures by State of Residence: Summary Tables*. Retrieved January 28, 2014 from <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/res-tables.pdf>.

<sup>4</sup> United States Department of Health and Human Services Health Resources and Services Administration. (2014). *Medically Underserved Areas/Populations (MUA/P) State Summary of Designated MUA/P*. Retrieved January 13, 2014 from <http://datawarehouse.hrsa.gov/Topics/ShortageAreas.aspx>.

<sup>5</sup> U.S. Department of Health and Human Services Health Resources and Services Administration. (2013). *First Quarter of Fiscal Year 2014 Designated HPSA Quarterly Summary*. Retrieved January 13, 2014 from <http://datawarehouse.hrsa.gov/Topics/ShortageAreas.aspx>.

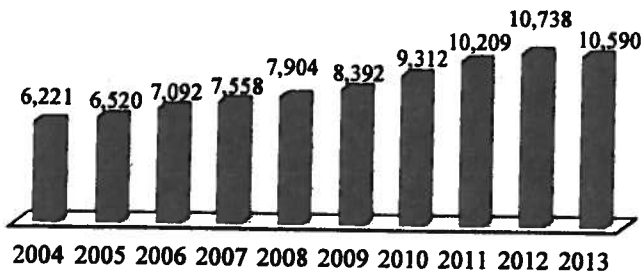
## National Perspective

The demand for nurses continues to grow as the projected need for healthcare services is expected to exceed the number of available Registered Nurses (RNs) and Advanced Practice Registered Nurses (APRNs). While an aging Baby Boomer generation requires an unprecedented demand for nursing services, a significant portion of the nursing workforce is looking to retire in the coming years. These two factors have created an upsurge in the anticipated number of nurses needed to replace those seeking retirement and to care for America's aging population. The Bureau of Labor Statistics' *Employment Projections: 2012-2022* anticipates that **1.1 million** job openings will be available for RNs and APRNs by 2022 as a result of job growth and replacements due to nurses retiring.

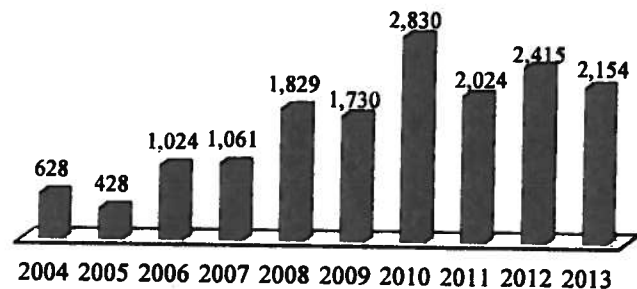
While the nursing profession provides a viable career choice now and into the future, Americans interested in pursuing this academic path enter a highly competitive application process. According to American Association of Colleges of Nursing's (AACN) 2013-2014 annual survey, U.S. nursing schools turned away **78,089 qualified applications** to baccalaureate and graduate nursing programs in 2013 due to insufficient numbers of faculty, clinical sites, classroom space, and clinical preceptors, as well as budget constraints. Schools of nursing across the country work each year to meet the demand for enrollment, but the nursing faculty shortage and budget limitations are preventing the sustainability of our nation's nursing education infrastructure and the pipeline of future nurses.

*Below are state-specific data that policy makers must consider as they make funding decisions that support nursing education. Fully understanding the critical economic concerns facing the nation, Congress must consider long-term financial planning for nursing education. Not doing so would place the health of our nation in jeopardy.*

**Number of Enrollments in Baccalaureate and Graduate Nursing Programs in MI**



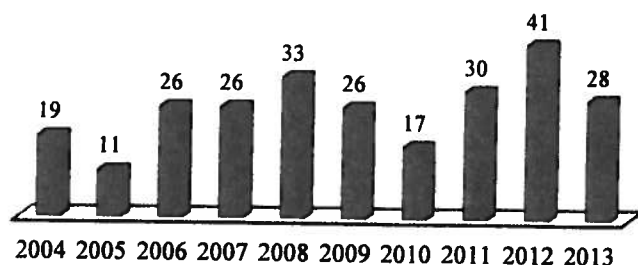
**Qualified Students Turned Away from Baccalaureate and Graduate Nursing Programs (Applications) in MI**



## Understanding the Faculty Shortage

A shortage of faculty is a primary obstacle to expanding the nation's nursing workforce. In 2013, AACN reported that thousands of qualified applicants were turned away from master's (14,458) and doctoral (1,774) programs due to a faculty shortage. Students are being turned away despite a great demand for doctoral faculty. According to AACN's *Survey on Vacant Faculty Positions for Academic Year 2013-2014*, most open faculty positions either require (56.9%) or prefer (30.0%) doctorally-prepared faculty members. *Of the schools surveyed, approximately two-thirds report insufficient funding to hire new faculty as one of the biggest obstacles to filling faculty vacancies.*

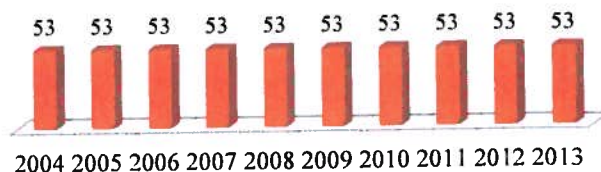
**Number of MI Faculty Vacancies 2004-2013**



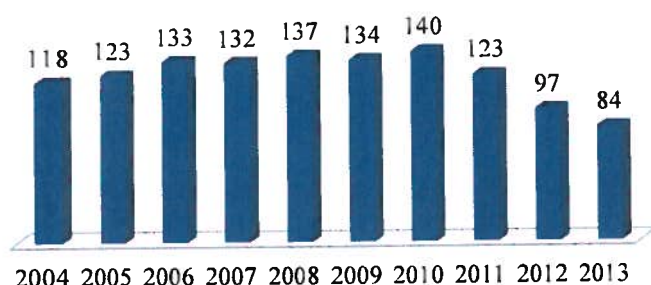


The problem will exacerbate as many faculty reach retirement age in the next decade. According to AACN's report on *2013-2014 Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing*, the average ages of doctorally-prepared nurse faculty holding the ranks of professor, associate professor, and assistant professor were 61, 57, and 51 years, respectively. An increased focus and investment must be placed on educating more doctorally-prepared nurses for faculty positions.

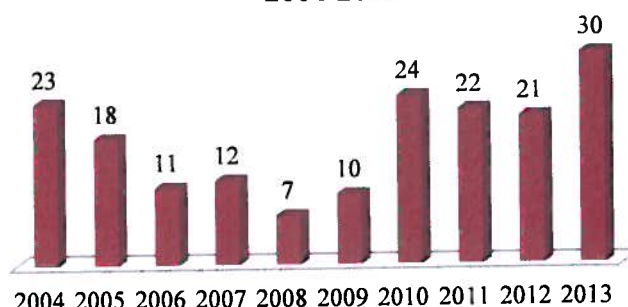
### Average Age for MI Faculty 2004-2013



### MI Doctoral Student Enrollments Research-Focused (PhD) 2004-2013



### MI Doctoral Student Graduations Research-Focused (PhD) 2004-2013



## State Demand for Federal Nursing Funding

AACN member schools educate RNs, APRNs, and other nurses with advanced degrees to serve America's patients and their families by providing quality care through direct clinical practice, groundbreaking research, and leadership in the healthcare field. Facing severe state budget cuts and the reality of the current economic climate, our schools and the students they educate depend on federal dollars. In particular, the Nursing Workforce Development programs authorized under Title VIII of the Public Health Service Act (42 U.S.C. 296 et seq.) and the National Institute of Nursing Research (NINR). The Title VIII grants are awarded to colleges and universities within each state and provide financial assistance to both nursing education programs and individual students. As one of the 27 Institutes and Centers at the National Institutes of Health, the NINR supports research that examines health and illness across the lifespan and establishes the scientific basis for quality patient care. Through grants, research training, and interdisciplinary collaborations, NINR addresses health promotion and disease prevention, quality of life, health disparities, and end-of-life care. NINR also helps train the next generation of nurse researchers, who serve as faculty in America's nursing schools.

### Michigan Title VIII Funding

FY2003: \$1,856,650  
 FY2004: \$1,736,202  
 FY2005: \$2,355,510  
 FY2006: \$2,826,813  
 FY2007: \$3,791,804  
 FY2008: \$4,421,107  
 FY2009: \$4,918,390  
 FY2010: \$4,696,914  
 FY2011: \$5,973,896  
 FY2012: \$5,372,305  
 FY2013: \$4,485,016

### Michigan NINR Funding

FY2003: \$4,262,591  
 FY2004: \$4,777,541  
 FY2005: \$5,540,659  
 FY2006: \$4,608,649  
 FY2007: \$4,560,814  
 FY2008: \$5,576,873  
 FY2009: \$5,080,315  
 FY2010: \$5,386,167  
 FY2011: \$5,859,025  
 FY2012: \$6,432,696  
 FY2013: \$4,090,335



**Summary of Fiscal Year 2013 Title VIII Grants by Michigan Congressional District**

Number of Grants Awarded	Program	Congressional District	Total Financial Assistance
1	NSL - Baccalaureate Nursing	MI-1	\$34,631
1	Advanced Education Nursing Traineeship	MI-2	\$347,652
1	Nurse Education, Practice, Quality and Retention - Veterans' Bachelor of Science in Nursing Program	MI-3	\$327,284
1	NSL - Baccalaureate Nursing	MI-4	\$33,577
1	Advanced Nursing Education Grants	MI-5	\$238,188
1	Nurse Anesthetist Traineeships	MI-5	\$14,228
1	Nurse Faculty Loan Program	MI-6	\$242,838
1	Nursing Workforce Diversity	MI-5	\$406,582
1	Nurse Anesthetist Traineeships	MI-8	\$18,412
1	Nurse Education, Practice, Quality, and Retention - Interprofessional Collaborative Practice	MI-8	\$489,091
1	Nurse Faculty Loan Program	MI-8	\$24,578
1	Nurse Anesthetist Traineeships	MI-11	\$31,260
1	Nurse Faculty Loan Program	MI-11	\$97,582
1	Advanced Nursing Education Grants	MI-12	\$335,821
2	Nurse Faculty Loan Program	MI-12	\$95,770
1	Nursing Workforce Diversity	MI-12	\$502,701
2	Nurse Anesthetist Traineeships	MI-13	\$47,108
1	Nurse Education Practice, Quality and Retention	MI-13	\$222,441
2	Nurse Faculty Loan Program	MI-13	\$645,888
1	Nursing Workforce Diversity	MI-13	\$331,308

Total Financial Assistance by District
MI-1: \$34,631
MI-2: \$347,652
MI-3: \$327,284
MI-4: \$33,577
MI-5: \$901,844
MI-8: \$530,079
MI-11: \$129,812
MI-12: \$934,292
MI-13: \$1,245,846

**Total Title VIII Funding in MI: \$4,485,016**

**Summary of Fiscal Year 2013 NINR Grants by Michigan Congressional District**

Project Title	Congressional District	Total Financial Assistance
Kin Keeper: Reducing Disparities Through Cancer Literacy and Screening	MI-8	\$376,917
An Innovative Caregiver Tool to Assess and Manage Behavioral Symptoms of Dementia	MI-12	\$389,246
In Their Own Words: Exploring Family Pathways to Housing Instability	MI-12	\$36,316
Posterior Hypothalamic Modulation of Pain	MI-12	\$374,363
Pretreatment Assessment of Cognitive and Immune Function in Individuals Newly Diagnosed with Cancer	MI-12	\$8,886
Quality of Life in Caregivers of Traumatic Brain Injury: The TBI-CareQOL	MI-12	\$547,566
Study of Women's Health Across the Nation IV	MI-12	\$426,802
Testing A Latino Web-Based Parent-Adolescent Sexual Communication Intervention	MI-12	\$381,790
Translating Unique Learning for Incontinence Prevention: The Tulip Project	MI-12	\$508,960
Behavioral Treatment of Menopausal Insomnia: Sleep, Depression, Daytime Outcomes	MI-13	\$441,471
Rater and Intensity Psychometrics of the Respiratory Disease Observation Scale	MI-13	\$72,048
Resilience-Based Psychosocial Intervention Among Children Affected by HIV/AIDS	MI-13	\$453,922
The Role of Racial Attitudes in Medical Interactions and Health Disparities	MI-13	\$72,048

Total Financial Assistance by District
<b>MI-8: \$376,917</b>
<b>MI-12: \$2,673,929</b>
<b>MI-13: \$1,039,489</b>

**Total NINR Funding in MI: \$4,090,335**